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U.S. PUBLIC HEALTH SERVICE. DIVISION  
OF PUBLIC HEALTH METHODS

DATING DECISION NUMBER 10



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U.S. Public Health Service Division of Toxic Health  
**Dating Decision Number 10**

**The Dating Periods Recommended  
for  
Those Biologic Products Specified  
In the Biologics Section of  
The Public Health Service Act of  
July 1, 1944**

NATIONAL INSTITUTE OF HEALTH

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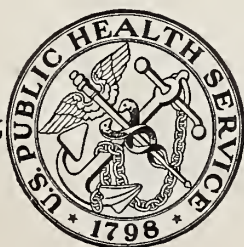
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*Issued May 15, 1947*

To Supersede Dating Decision Number 9

Issued January 25, 1943

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FEDERAL SECURITY AGENCY  
UNITED STATES PUBLIC HEALTH SERVICE

THOMAS PARRAN, *Surgeon General*

DIVISION OF PUBLIC HEALTH METHODS

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## SUBJECT: DATING DECISION NUMBER 10

TO: THE MANUFACTURERS OF THOSE BIOLOGIC PRODUCTS SPECIFIED IN SECTION 351 (A) OF PART F—BIOLOGIC PRODUCTS—OF THE PUBLIC HEALTH SERVICE ACT OF JULY 1, 1944, AND OTHERS CONCERNED

The methods of determining the beginning of the dating period for each product are specified in sections 22.78 and 22.79 of the Regulations, approved January 21, 1947. The purpose of the Dating Decision is to make recommendations as to (1) the interval of time allowable for the dating period of each product and (2) the conditions of storage during the dating period which are deemed necessary in order to warrant the particular dating period. Dating Decision Number 10 supersedes Dating Decision Number 9, issued January 25, 1943.

### DEFINITIONS

- 1.1 (a) "Dating period" means the period beyond which the product cannot be expected beyond reasonable doubt to yield its specific results.
- (b) "Expiration date" means the date of termination of the dating period.
- (c) "Date of manufacture" means that point in the preparation of a product as is specified in section 22.78 of the Regulations.

Regulation (Sec. 22.78) *Dating period; date of manufacture.*—The dating period shall be determined with reference to the date of manufacture which shall be:

(a) For products for which an official standard of potency exists or which are subject to official potency tests, the last date of satisfactorily passing a potency test;

(b) For products for which no official standard of potency exists or which are not subject to official potency tests,

(1) The date of removal from the animal in case of animal products;

(2) The date of extraction in the case of products used for specific desensitization;

(3) The date of solution in case of venoms, and

(4) The date of cessation of growth in case of other products;

(c) For products which are submitted to the Institute for approval prior to release, the date of official release notice.

- (d) "Date of passing potency test" means the date of completion of potency test when performed by the manufacturer

and the date of the official release notice when a product is submitted to the National Institute of Health for approval prior to release.

- (e) "Date of issue" means the date on which the finished product is removed from cold storage and made available for, or placed in, distribution by the manufacturer.
- (f) "Period of storage" means the interval between the date of manufacture and the date of issue when the product is held as is specified in section 22.79 of the Regulations.

Regulation (Sec. 22.79) *Dating period; products in cold storage.*—The dating period may be determined with reference to the period of issue from cold storage, *Provided*, That, except as may be otherwise prescribed for individual products, the date of such issue is not more than six months after the date of manufacture and the product is kept constantly at a temperature not exceeding 10° C., or not more than 1 year after the date of manufacture if the product is kept constantly at a temperature not exceeding 5° C., or not more than 2 years if the product is kept constantly at a temperature not exceeding 0° C.

- (g) "Dried product" means a product which contains not more than 1.00 percent of moisture,—except when otherwise specified for a product, as indicated by the loss of weight when tested by an approved method.
- (h) "Recommended storage temperature" means the temperature statement required on the label of a finished product (see section 22.52 (c) of the Regulations). An appropriate statement would be: "Keep at 2° to 10° C. (35.6° to 50° F.),"—except when otherwise specified for a product. (Where space on the label is limited, the temperature may be indicated in only one scale.)

## EXPIRATION DATES FOR PRODUCTS

(Not later than as indicated herewith)

### 1.2 *Antitoxins with official standards, or subject to official potency tests:*

- (a) *Liquid antitoxins.*—One year after date of manufacture or 1 year after date of issue, with a 20 percent excess of potency; 2 years with a 30 percent excess; 3 years with a 40 percent excess; or 4 years with a 50 percent excess, except that the expiration date for *Meningococcus* antitoxin is to be not later than 1 year after date of manufacture or 1 year after date of issue.
- (b) *Dried antitoxins.*—Five years after date of manufacture or 5 years after date of issue, with a 10 percent excess of potency, except that the expiration date for *Meningococcus* antitoxin is to be not later than 5 years after date of



manufacture or 5 years after date of issue with no excess of potency required.

1.3 *Antitoxins without official standards and not subject to official potency tests:*

- (a) *Liquid antitoxins*.—One year after date of manufacture or 1 year after date of issue.
- (b) *Dried antitoxins*.—Five years after date of manufacture or 5 years after date of issue.

1.4 *Immune therapeutic serums with official standards, or subject to official potency tests:*

- (a) *Unmodified liquid immune serums*.—One year after date of manufacture, or 1 year after date of issue if the date of issue is not more than 2 years after the date of manufacture and the product is kept constantly at a temperature not exceeding 5° C.
- (b) *Modified liquid immune serums*.—Two years after date of manufacture, or 2 years after date of issue if the date of issue is not more than 2 years after the date of manufacture and the product is kept constantly at a temperature not exceeding 5° C.
- (c) *Dried immune serums*.—Five years after date of manufacture or 5 years after date of issue.

1.5 *Immune therapeutic serums without official standards and not subject to official potency tests:*

- (a) *Unmodified liquid immune serums*.—One year after date of manufacture, or 1 year after date of issue if the date of issue is not more than 2 years after the date of manufacture and the product is kept constantly at a temperature not exceeding 5° C.
- (b) *Modified liquid immune serums*.—Two years after date of manufacture, or 2 years after date of issue if the date of issue is not more than 2 years after the date of manufacture and the product is kept constantly at a temperature not exceeding 5° C.
- (c) *Dried immune serums*.—Five years after date of manufacture or 5 years after date of issue.

1.6 *Nonimmune blood derivatives:*

- (a) *Liquid normal human serum*.—Eighteen months after date of manufacture or 18 months after date of issue if the date of issue is not more than 2 years after date of manufacture and the product is kept constantly at a temperature not exceeding 5° C.
- (b) *Liquid normal human plasma*.—Eighteen months after date of manufacture provided the product is kept at a temperature between 15° and 30° C.; the label should bear the

statement following the expiration date: "if kept between 15° and 30° C. (59° and 86° F.)."

- (c) *Frozen normal human serum and plasma*.—Three years after date of manufacture provided the product is kept constantly at a temperature not exceeding *minus* 18° C.; the label should bear the statement following the expiration date "if kept below *minus* 18° C. (*minus* 0.4° F.)." Frozen serum may be melted and given an expiration date not more than 1 year after the date of melting. Frozen plasma may be melted and given an expiration date not more than 1 year after the date of melting provided the melted product is kept constantly at a temperature between 15° and 30° C.; the label should bear the statement following the expiration date "if kept between 15° and 30° C. (59° and 86° F.)."
- (d) *Other liquid normal serums*.—Three years after date of manufacture or 3 years after date of issue.
- (e) *Dried normal serum and plasma*.—Five years after date of manufacture or 5 years after date of issue.
- (f) *Liquid normal serum albumin*.—Five years after date of manufacture or 5 years after date of issue provided the product is prepared as a 25 percent solution in a suitably buffered diluent.
- (g) *Dried antihemophilic globulin*.—One year after date of manufacture or 1 year after date of issue.
- (h) *Dried thrombin*.—Three years after date of manufacture or 3 years after date of issue.
- (i) *Dried fibrinogen*.—Three years after date of manufacture or 3 years after date of issue.
- (j) *Hemostatic globulin*.—One year after date of manufacture or 1 year after date of issue.
- (k) *Fibrin foam*.—Three years after date of manufacture or 3 years after date of issue.
- (l) *Fibrin film*.—Three years after date of manufacture or 3 years after date of issue.
- (m) *Citrated whole blood*.—Twenty-one days after date of manufacture, but only if stored continuously at 4° to 10° C., preferably 4° to 6° C.
- (n) *Packed or resuspended red blood cells*.—Ten days after date of manufacture, but only if stored continuously at 4° to 10° C., preferably 4° to 6° C.
- (o) *Human red blood cells*.—Either dried or as a paste, 1 year after date of manufacture or 1 year after date of issue.
- (p) *Blood grouping serum*.—One year if liquid, and 5 years if dried, after date of manufacture or the corresponding intervals after date of issue.



(q) *Anti-Rh typing serum*.—The same as 1.6 (p).

1.7 *Vaccines made from Viruses and Rickettsiae:*

- (a) *Smallpox vaccine*.—Three months after date of manufacture or 3 months after date of issue for glycerinated vaccine; but only if the label bears the following statement: "expiration date: \_\_\_\_\_, if kept below 5° C. (41° F.); preferably below 0° C. (32° F.)." The date of issue to be not more than 9 months after date of manufacture. The date of manufacture may be the date of last passing potency test, provided the freshly harvested unglycerinated pulp has been stored at *minus* 20° C. or lower and the glycerinated vaccine, either in bulk or finished capillaries, has been stored below *minus* 10° C.
- (b) *Dried smallpox vaccine*.—Six months after date of manufacture or six months after date of issue.
- (c) *Rabies vaccine*.—Six months after date of manufacture or 6 months after date of issue. The date of issue to be not more than three months after the date of suspending the brain tissue provided the product is kept above freezing, but not over 5° C. The date of manufacture is the date of preparing the brain suspension provided the whole brain has been continuously stored without preservative at *minus* 15° C. or lower.
- (d) *Yellow fever vaccine*.—One year after date of manufacture or 1 year after date of issue provided the product is kept constantly below 5° C. (41° F.); the label should bear the statement following the expiration date: "If kept below 5° C. (41° F.); preferably below 0° C. (32° F.)." The date of issue to be not more than 1 year after date of manufacture provided the product is kept constantly below *minus* 5° C. (23° F.), preferably below *minus* 20° C. The date of manufacture may be the date of last passing potency test, provided the harvested material has been stored continuously at *minus* 20° C. or lower.
- (e) *Influenza virus vaccine*.—Eighteen months after date of manufacture or 18 months after date of issue.
- (f) *Typhus vaccines*.—Eighteen months after date of manufacture or 18 months after date of issue.
- (g) *Rocky Mountain spotted fever vaccine*.—Eighteen months after date of manufacture or 18 months after date of issue.
- (h) *Equine encephalomyelitis vaccine*.—Twelve months after date of manufacture or 12 months after date of issue.
- (i) *Encephalitis, herpes "F" strain vaccine*.—Twelve months after date of manufacture or 12 months after date of issue.

1.8 *Vaccines and antigens made from bacteria:*

- (a) *Bacterial vaccines*.—Eighteen months if liquid, and 5 years if dried, after date of manufacture or the corresponding intervals after date of issue.
- (b) *Sensitized bacterial vaccines*.—The same as 1.8 (a).
- (c) *Modified bacterial derivatives*.—The same as 1.8 (a).
- (d) *Bacterial antigens*.—The same as 1.8 (a).

1.9 *Toxins, toxoids and tuberculins:*

- (a) *Diphtheria toxin for the Schick test*.—Six months after date of manufacture or 6 months after date of issue for undiluted toxin. One year after date of manufacture or 1 year after date of issue for diluted toxin.
- (b) *Diphtheria toxoid*.—Two years after date of manufacture or 2 years after date of issue.
- (c) *Scarlet fever streptococcus toxin for the Dick test*.—One year after date of manufacture or 1 year after date of issue for diluted toxin. Five years after date of manufacture for undiluted toxin if kept constantly at a temperature not exceeding 5° C.
- (d) *Scarlet fever streptococcus toxin for immunization*.—The same as 1.9 (c).
- (e) *Streptococcus erythrogenic toxin*.—The same as 1.9 (c).
- (f) *Staphylococcus toxoid*.—The same as 1.9 (b).
- (g) *Tetanus toxoid*.—The same as 1.9 (b).
- (h) *Liquid tuberculins*.—Five years after date of manufacture or 5 years after date of issue in case of concentrated tuberculins containing at least 50 percent glycerin. One year after date of manufacture or 1 year after date of issue in case of other liquid tuberculins.
- (i) *Dried tuberculins*.—Five years after date of manufacture or 5 years after date of issue.

1.10 *Allergenic extracts:*

- (a) *Pollen, animal derivative, food, vegetable derivative, and miscellaneous extracts*.—Animal oil extracts and vegetable oil extracts, 5 years after date of manufacture or 5 years after date of issue. All others, 18 months after date of manufacture, or 18 months after date of issue, except that the date of issue for extracts containing at least 50 percent glycerin may extend to a maximum of 4 years after date of manufacture, or 4 years after date of issue if the product is kept constantly at a temperature not exceeding 10° C.
- (b) *Fungus extracts and fungus antigens*.—Three years after date of manufacture or 3 years after date of issue if the date of issue is not more than 2 years after date of manufacture and the product is kept constantly at a temperature not exceeding 5° C.

1.11 *Trivalent organic arsenicals:*

- (a) *Acetylglucarsenobenzene*.—Eighteen months after date of manufacture.
- (b) *Arsphenamine*.—Five years after date of manufacture.
- (c) *Arsphenamine diglucoside*.—The same as 1.11 (b).
- (d) *Bismuth arsphenamine sulfonate*.—The same as 1.11 (b).
- (e) *Dichlorophenarsine hydrochloride*.—Three years after date of manufacture.
- (f) *Neoarsphenamine*.—Four years after date of manufacture.
- (g) *Oxophenarsine hydrochloride*.—Two and one-half years after date of manufacture.
- (h) *Oxophenarsine triazine*.—Two and one-half years after date of manufacture.
- (i) *Silver arsphenamine*.—The same as 1.11 (b).
- (j) *Sulfarsphenamine*.—The same as 1.11 (b).

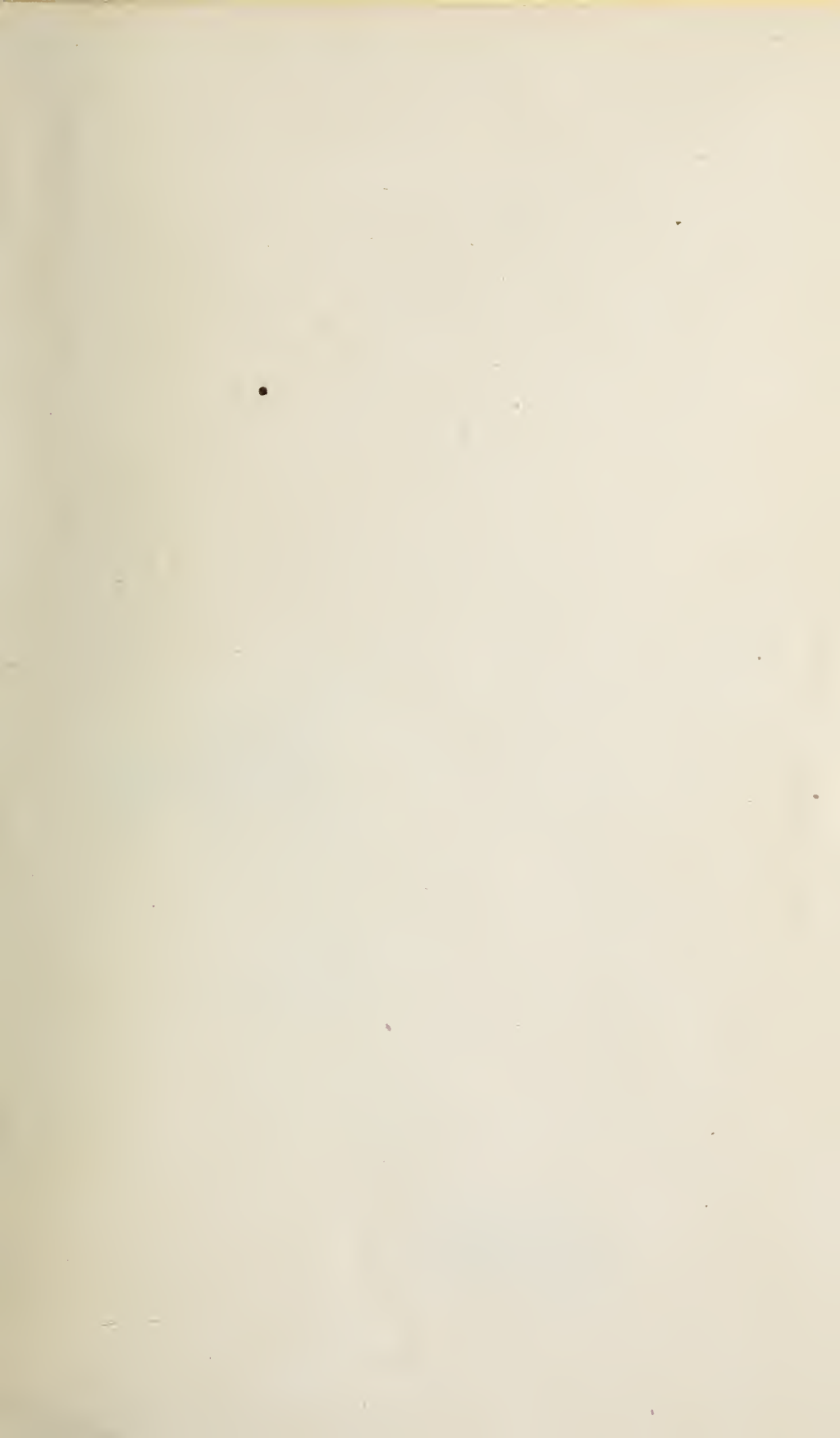
1.12 *Miscellaneous products:*

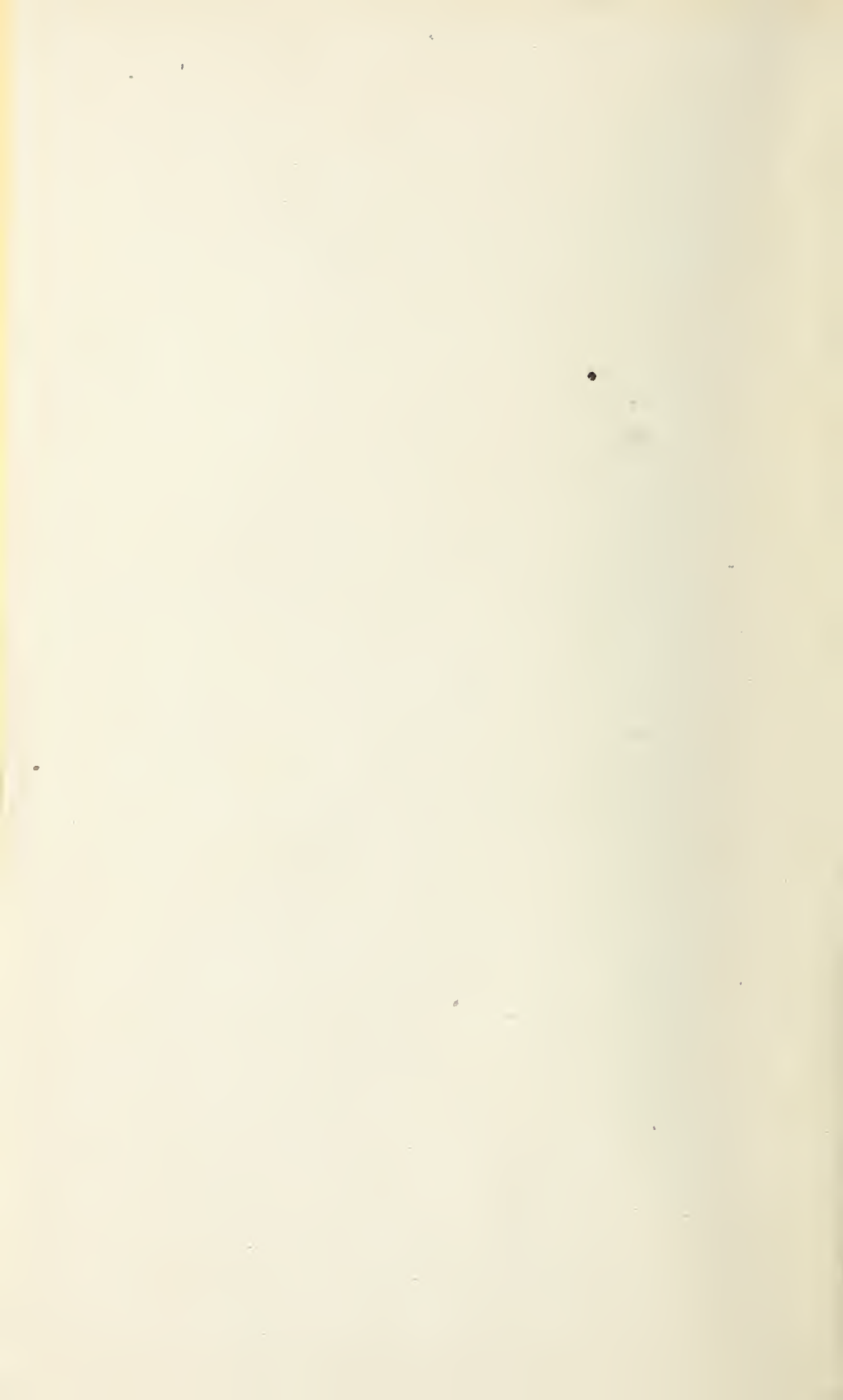
- (a) *Poison ivy, poison oak, and poison sumac*.—Five years after date of manufacture or 5 years after date of issue.
- (b) *Venoms*.—Eighteen months if liquid, and 5 years if dried, after date of manufacture, or the corresponding intervals after date of issue.
- (c) *Trichinella extract*.—The same as 1.12 (b).
- (d) *Leucocyte extract*.—One year after date of manufacture or 1 year after date of issue.
- (e) *Blood group specific substance A and B*.—One year after date of manufacture or 1 year after date of issue.
- (f) *Histamine azoprotein*.—One year after date of manufacture or 1 year after date of issue.

THOMAS PARRAN  
Surgeon General













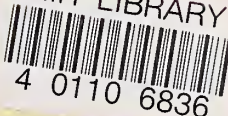
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